



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

JUN 11 2008

Mr. Chuck Corell  
Iowa Department of Natural Resources  
Water Pollution Control Branch  
Wallace State Office Building  
502 East 9<sup>th</sup> Street  
Des Moines, Iowa 50319-0034

Dear Mr. Corell:

This letter transmits the comments of the United States Environmental Protection Agency (EPA) on the draft document entitled *Iowa Antidegradation Implementation Procedure* (the Procedure), which the Iowa Department of Natural Resources (IDNR) provided via email on May 15, 2008. EPA appreciates the opportunity to comment on the Procedure that will be discussed at upcoming public meetings.

EPA understands that Iowa will be presenting the Procedure at public meetings and at public hearings in the near future prior to submitting the final version to EPA for approval. EPA is providing these comments to obtain clarification on several items of concern prior to Iowa's submission of the final Procedure. We look forward to receiving IDNR's responses to the enclosed comments.

Thank you for providing us this opportunity to comment. We appreciate the cooperative efforts of you and your staff in developing this Procedure. If you have any questions please do not hesitate to call me at (913) 551-7821, or John Reyna, of my staff, at (913) 551-7021.

Sincerely,

A handwritten signature in black ink, appearing to read "John DeLashmit".

John DeLashmit  
Chief  
Water Quality Management Branch

Enclosure

## GENERAL COMMENTS

As a performance-based approach, the Antidegradation Implementation Procedures (AIP) should be binding, clear, predictable, and transparent (*see* Alaska Rule preamble, 2000). The Environmental Protection Agency (EPA) asks the Iowa Department of Natural Resources (IDNR) to provide detailed responses to its comments and questions to avoid ambiguity in the AIP.

EPA cannot determine how IDNR is defining an “expanded discharge” within the draft AIP. Please clarify the following:

- 1) Whether an expanded discharge applies to either a request for higher permit limits, increased mass loadings, or both;
- 2) Whether a mass loading increase from a permitted discharge triggers an antidegradation review;
- 3) How IDNR defines an expanded discharge; and,
- 4) How IDNR will determine degradation when analyzing design flows used to calculate permit limits, versus using the overall design flow capacity of a facility. This explanation should include a discussion or example of how waste load allocations and the availability of assimilative capacity of a water body will be calculated.

Please clarify to what extent IDNR will require a facility to retroactively perform an alternative analysis for discharges that have been previously permitted.

## SPECIFIC COMMENTS

### 1. Glossary

#### a. Pollutant of Concern

- EPA requests that IDNR clarify whether the current definition of “pollutants of concern” is limited to only pollutants with numeric criteria. If so, please explain why the definition excludes other pollutants covered by the state’s narrative criteria that have the potential to degrade water quality, e.g., sediment and nutrients, and whether narrative translators will be applied as a pollutant of concern (e.g., using trophic state indices in a downstream lake/reservoir that may be immediately impacted by a new or expanded discharge to a stream).

b. Temporary and Limited Degradation

- It is unclear how the term “insignificant” is defined when determining which factors could affect degradation. Please clarify whether “insignificant” means an antidegradation review will not be required.
- Please clarify whether the review must consider all of the factors listed in this definition, or only some. Adding an “and” or an “or” after the second-to-last factor will clarify this.
- Please clarify how IDNR will weigh limitations of degradation for different pollutants in regards to factor c) “pollutants affected.”
- Please clarify how pollutants with only narrative standards and pollutants with numeric criteria will be considered when determining temporary and limited degradation.
- Please describe how the department will assess and weigh factors to determine temporary and limited degradation.

c. Tier 2 Review

- Please clarify whether the “temporary and limited lowering” or “insignificant lowering” thresholds apply to Tier 2 waters.

d. Tier 2 ½ Review

- Related to the comment above on Tier 2, please clarify whether “unless the lowering is temporary and limited” means that the lowering is “insignificant” and does not require an antidegradation review.

**2. Purpose and Overview, page 3**

- The third bullet reads: “*assessing and determining water quality degradation.*” The meaning of this bullet is not clear. EPA requests clarification as to the meaning of *determining water quality degradation* and how this will be used as part of an analysis.

**3. Section 1.1, Summary of Applicable Laws and Regulations on Antidegradation**

- The AIP is silent on discussing how IDNR will conduct antidegradation reviews for general use waters and the applicable narrative criteria that apply to those waters. EPA interprets the latter statement to mean that IDNR will apply its antidegradation implementation procedures and conduct reviews to general use waters.

EPA also requests clarification on how a general use water's assimilative capacity will be calculated and, in turn, how the potential for degradation will be evaluated on general use waters.

#### 4. Section 1.2, Assigning Tier Protection Levels

##### a. Tier 2

- The intent of a Tier 2 protection is to maintain and protect high quality water and not to allow for any degradation without having made a demonstration, with opportunity for public input, that such a lowering is necessary and important. The EPA believes that, in general, Tier 2 and higher protection is applicable to a majority of waters. EPA requests that IDNR provide an estimate of the percentage of the state's waters, subject to antidegradation, that will receive Tier 2 protection.
- According to the schematic flowchart in Appendix B, Tier 2 is only applicable to perennial waters. Please clarify if the intent of the antidegradation policy is to only apply Tier 2 reviews to perennial waters and, if so, the rationale behind this approach.
- The last sentence on page 5 reads: "*Where waters have not been listed as impaired or as an OIW and ONRW, the presumed antidegradation protection level is Tier 2 for all pollutants of concern.*" EPA requests clarification on how IDNR will conduct a Tier 1 review for impaired waters versus unimpaired waters.

##### b. Tier 3

- The last sentence in the first paragraph on page 6 reads: "*Waters already containing pollutants of concern, at or violating the standard will qualify for Tier 1 protection for those pollutants.*" EPA requests clarification on what waters will receive Tier 1 protection versus "qualify" for Tier 1 protection in these instances.

##### c. Assigning Tier 2 ½ & Tier 3 Review

- The last paragraph in section 1.2, on page 7, allows for an exception for Tier 2 ½ waters. Exceptions for Tier 2 ½ are not consistent with IDNR's AIP regarding Tier 2 ½ waters ("no permanent lowering of WQ"). If, overall, the permanent new or expanded discharge would maintain or enhance the water quality in the OIW, please clarify whether a statement can be made that there is no permanent lowering of water quality. Also, this exception mentions Outstanding Iowa Water's (OIW's), but not Outstanding National Resource Water's (ONRW's), which we assume is what IDNR intended to reference; please clarify whether this assumption is correct. EPA recommends relocating this paragraph to a different section of the AIP where IDNR describes how a Tier 2 ½ review is done (with one exception).

## 5. Section 1.3, Revising Tier Review Levels

- The sentence between the two lists of bullets reads: *“The department may adopt, by rule, site-specific water quality standards to maintain and protect existing water quality for an OIW or ONRW. The department may consider the following factors when making a decision whether to classify a nominated surface water as OIW or ONRW.”* EPA requests clarification as to how the factors identified in the second set of bullets relate to the criteria identified in the first set of bullets. Is the first set of bullets (criteria) for a citizen to consider when nominating a water body for OIW or ONRW status, and the second list of bullets (factors) for IDNR to consider when classifying a water body as an OIW or ONRW?
- Please clarify whether or not a water body must be perennial in order to qualify as an OIW or ONRW (as noted in the first bullet in this section).

## 6. Section 2, Iowa’s Antidegradation Implementation Procedure, page 9

- The third paragraph reads: *“Antidegradation reviews are required when proposed new or expanded discharges will degrade water quality. In addition to reviewing the necessity for a discharge and the social and economic importance of the discharging activity, the department and applicants must ensure that proposed discharges fully protect beneficial uses, and achieve the highest statutory and regulatory requirements. The department must also assure that activities within the watershed are implementing cost-effective, reasonable best management practices to control nonpoint source pollution. Determinations issued under these provisions must be made in accordance with the public notification process described in Section 6 of this document. A decision diagram of the antidegradation review process is provided as Appendix B of this document.”* Please clarify whether this paragraph refers to all antidegradation reviews or only to Tier 2 reviews.

## 7. Section 2.1, Determining the Appropriateness of Degradation, page 10

- The first bullet under “A regulated discharge shall not be considered to result in degradation if” reads, *“The proposed net increase in the discharge of a pollutant of concern does not result in an increase in potential mass loading or an increase in the ambient water quality concentration of the receiving water after mixing.”* The AIP cannot provide less restriction for mixing zones than what is allowed in Iowa’s water quality standards. EPA requests an explanation regarding the use of mixing zones, and what acute and chronic criteria would be applied under the AIP.
- The second bullet reads: *“A permit for an existing facility does not propose less stringent permit limits.”* Please clarify whether this only applies to OIW’s and ONRW’s.
- The fifth bullet reads: *“Treatment is added to a previously unpermitted discharge.”* Please clarify the meaning of this bullet, and provide an example of how it will be applied to unsewered communities.

**8. Section 2.2, Determining Existing Water Quality, page 11**

- The fourth paragraph reads: *"The preferred approach for assessing existing water quality is to use previously collected data where available or presume default background levels"* Please provide the rationale behind the approach of using "default background levels" and provide a description of the source(s) from which IDNR will obtain this data.
- The fourth paragraph also refers to the use of *"appropriate reference data where it can be shown that the reference data is likely to reflect conditions in the water body in question."* Please clarify what is meant by the term "reference data" and what parameters will be considered as reference data.

**9. Section 3.2, Evaluating and Selecting Alternatives, page 14**

- The fourth paragraph on page 14 reads: *"As non-binding guideline, alternatives less than 115 percent of the base cost of pollution control measures are economically efficient. Alternatives greater than 115 percent of the base costs should also be considered if implementation of the alternative would produce a substantial improvement in the resulting discharge. Conditions that might warrant consideration of alternatives of greater cost (above 115 percent) are the effectiveness, reliability, and environmental factors identified above."* EPA requests clarification on how and why IDNR selected 115 percent as its basis for selecting alternatives.

**10. Section 5.3, Intergovernmental Coordination and Review, page 21**

- EPA requests clarification on how IDNR will reconcile disagreements between local, state, and federal governments if another state wishes to use available assimilative capacity on an adjacent, upstream or downstream water body.

**11. Section 6.1, General Permits, page 24**

- EPA requests clarification on how IDNR will provide antidegradation reviews for general permits. Please also provide clarification on how IDNR will make information on the various projects covered by a general permit, and the receiving waters the permit may affect, available to the public.

**12. Section 6.3, 401 Certifications, page 25**

- The last sentence in the third paragraph reads: *"Minor activities covered under §404 nationwide permits may be subject to a full antidegradation review if the Director determines that cumulative degradation resulting from multiple discharges within a watershed, degradation from a single discharge over time, or other individual circumstances warrant a full antidegradation review."* EPA requests the rationale for this approach.

- In reference to the last paragraph on page 25 and first two sentences on page 26, the 404(b)(1) guidelines do not cover Tier 2 review as noted in EPA's WQS Handbook (1994). EPA requests that these sections be deleted.

**13. Section 9, Administrative Records of Decisions Regarding Antidegradation, page 30**

- The Record of Decision for Antidegradation must include the National Pollutant Discharge Elimination System permit as well as the waste load allocation calculations used to support the permit limits within the permit.